Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A network interface circuit for transmitting signals to different nodes of a network, the network interface circuit comprising:

a MAC circuit;

a first scrambler coupled to the MAC circuit for generating a first transmission signal by executing a logic operation with a first signal and a first scrambling code, the first scrambler comprising a first random number generator for executing a second logic operation with a first seed to generate the first scrambling code;

a second scrambler coupled to the MAC circuit for generating a second transmission signal by executing the logical operation with a second signal and a second scrambling code, the second scrambler comprising a second random number generator for executing the second logic operation with a second seed to generate the second scrambling code, wherein the first seed and the second seed are different elements of a same set of seeds, each element of the set of seeds being utilized by each of the first and the second random number generators in turn ~~the first scrambling code and the second scrambling code are different such that the first transmission signal and the second transmission signal are unlike~~;

a first transmission port coupled to the first scrambler for transmitting only the first transmission signal to a network node; and

a second transmission port coupled to the second scrambler for transmitting only the second transmission signal to another network node.

Claim 2 (currently amended): The network interface circuit of claim 1 wherein ~~the first scrambler comprises a first random number generator for executing a second logic operation with a first seed to generate the first scrambling code, and the second scrambler comprises a second random number generator for executing the second logic operation with a second seed to generate the second scrambling code; wherein~~ the first seed and the second seed are different so that the first scrambling code and the second scrambling code are unlike.

Claim 3 (original): The network interface circuit of claim 2 capable of updating the value of the first seed after a predetermined period after the first scrambler generates the first transmission signal, and capable of updating the value of the second seed after the predetermined period after the second scrambler generates the second transmission signal.

Claim 4 (original): The network interface circuit of claim 3 in which the first scrambler generates the first transmission signal after receiving a first reset signal, and the second scrambler generates the second transmission signal after receiving a second reset signal, wherein the first reset signal and the second reset signal are transmitted to the first scrambler and the second scrambler respectively at different times so that the first scrambler and the second scrambler start to generate the first transmission signal and the second transmission signal respectively at different times.

Claim 5 (original): The network interface circuit of claim 4 capable of setting an initial value to the first seed when the first scrambler receives the first reset signal and another initial value to the second seed when the second scrambler receives the second reset signal.

Claim 6 (previously presented): The network interface circuit of claim 1 further comprising a first encoder and a second encoder for encoding the first transmission signal and the second transmission signal respectively in the same way, the encoded first transmission signal and the encoded second transmission signal being transmitted to the corresponding network nodes through the first and second transmission ports, wherein the first encoder and the second encoder encode a signal composed of 0 and 1 values to one composed of 0, 1, and –1 values.

Claim 7 (canceled)

Claim 8 (currently amended): A network interface circuit for transmitting signals to different nodes of a network; the network interface circuit comprising:

a reset circuit for generating a first reset signal and a second reset signal;

a first signal circuit coupled to the reset circuit and comprising at least a first scrambler and generating a first transmission signal by utilizing the first scrambler to execute a logical operation with a first signal and a first scrambling code when receiving a first reset signal, the first scrambler comprising a first random number generator for executing a second logic operation with a first seed to generate the first scrambling code;

a second signal circuit coupled to the reset circuit and comprising at least a second scrambler and generating a second transmission signal by utilizing the second scrambler to execute the logical operation with a second signal and a second scrambling code when receiving a second reset signal, the second scrambler comprising a second random number generator for executing the second logic operation with a second seed to generate the second scrambling code, wherein the first seed and the second seed are different, non-equal elements of a same set of seeds

utilized by each of the first and the second random number generators;

a first transmission port coupled to the first scrambler for transmitting the first transmission signal to a network node; and

a second transmission port coupled to the second scrambler for transmitting the second transmission signal to another network node.

Claim 9 (original): The network interface circuit of claim 8 in which the reset circuits generate the first reset signal and the second reset signal at different times so that the time of the first signal circuit to generate the first transmission signal and the time of the second signal circuit to generate the second transmission signal are not the same.

Claim 10 (canceled)

Claim 11 (currently amended): A method for a network interface circuit to transmit signals to different nodes of a network, the method comprising:

generating a first scrambling code according to a first seed number;

generating a second scrambling code according to a second seed number, the first seed and the second seed being different elements of a same set of seeds;

utilizing each element of the set of seeds to be the first seed number and to be the second seed number in turn;

executing a logical operation with a first signal and [[a]] the first scrambling code to generate a first transmission signal , and executing the logical operation with a second signal and [[a]] the second scrambling code to generate a second transmission signal, wherein the second scrambling code is different ~~with~~ from the first scrambling code so the first transmission signal and the second transmission ~~signals~~ signal are different even when the

first signal is equal to the second signal; and

transmitting the first transmission signal to a node of the network and the second transmission signal to another node of the network respectively.

Claim 12 (canceled)

Claim 13 (currently amended): The method of claim [[12]] 11 in which the value of the first seed is updated after a predetermined period after the first transmission signal is generated, and the value of the second seed is updated after the predetermined period after the second transmission signal is generated.

Claim 14 (original): The method of claim 13 in which the first transmission signal is generated after receiving a first reset signal, and the second transmission signal is generated after receiving a second reset signal, wherein the first reset signal and the second reset signal turn on the process of generating the first scrambling code and the process of generating the second scrambling code at different times, so that the first transmission signal and the second transmission signal are generated at different times.

Claim 15 (original): The method of claim 14 in which the first seed is set to an initial value when the first reset signal is received, and the second seed is set to another initial value when the second reset signal is received.

Claim 16 (previously presented): The method of claim 11 capable of encoding the first transmission signal and the second transmission signal respectively in the same way, the encoded first transmission signal and the encoded second transmission signal being transmitted to the corresponding network nodes through two transmission ports, the way of encoding is to encode a digital signal composed of 0 and 1 values

to one composed of 0, 1, and –1 values.

Claim 17 (canceled)

Claim 18 (currently amended): A method for a network interface circuit to transmit signals to different nodes of a network, the method comprising:

generating a first scrambling code according to a first seed number;

generating a second scrambling code according to a second seed number, the first seed and the second seed being different, non-equal elements of a same set of seeds;

utilizing each element of the set of seeds to be the first seed number and to be the second seed number in turn;

receiving a first reset signal and a second reset signal;

executing a logical operation with a first signal and [[a]] the first scrambling code to generate a first transmission signal right after receiving the first reset signal, and executing the logical operation with a second signal and [[a]] the second scrambling code to generate a second transmission signal right after receiving the second reset signal, wherein the second transmission signal are different from the first transmission signal; and

transmitting the first transmission signal to a first node of the network and the second transmission signal to another node of the network respectively.

Claim 19 (original): The method of claim 18 generating the first reset signal and the second reset signal at different times respectively so that the times to generate the first transmission signal and the second transmission signal are different.

Claim 20 (canceled)